

**AMENDMENTS TO THE CLAIMS**

The listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims**

Claims 1 – 5 (Canceled)

6. (Currently Amended) ~~The~~A cable modem tuner ~~according to claim 1,~~  
comprising:

a tuner circuit taking and amplifying a signal corresponding to a reception channel from input signals, and converting to an intermediate frequency signal of a first frequency band; and

a down converter circuit receiving the intermediate frequency signal of said first frequency band from said tuner circuit, and selectively outputting an intermediate frequency signal of said first frequency band or a second frequency band lower than said first frequency band, wherein

said down converter circuit includes

a local oscillation circuit generating an oscillation signal corresponding to said second frequency band in a first mode in which the intermediate frequency signal of said second frequency band is output, and stopping generation of said oscillation signal in a second mode in which the intermediate frequency signal of said first frequency band is output,

a mixer circuit for mixing the intermediate frequency signals of said first frequency band input to said down converter circuit with an output of said local oscillation circuit, and outputting an intermediate frequency signal of said second frequency band in said first mode and outputting an intermediate frequency signal of said first frequency band in said second mode, and

a filter circuit receiving an output signal from said mixer circuit and passing a signal of a frequency corresponding to a set cut off frequency, wherein

said local oscillation circuit includes

an oscillation element oscillating at said second frequency band,

a first bipolar transistor receiving at a base an output of said oscillation element,

a first bias resistance coupled between the base of said first transistor and a first voltage node, and

a second bias resistance connected between an emitter of said first bipolar transistor and a ground node; and

said mixer circuit includes

a second bipolar transistor connected at a base to said first voltage node, and receiving at the base an output of said oscillation element and the intermediate frequency signal of said first frequency band, and

a third bias resistance connected between the base of said second bipolar transistor and a second voltage node supplying a voltage higher than said first voltage node.

7. (Original) The cable modem tuner according to claim 6, wherein said local oscillation circuit includes a switch element of which on/off is instructed externally, connected parallel to said oscillation element, said switch element turning on/off in said first and second modes, respectively.

8. (Original) The cable modem tuner according to claim 6, wherein said filter circuit and said bias resistance are mounted on one surface of a printed board, and said down converter circuit except for said second bias resistance is mounted on the other surface of the printed board.

Claims 9 – 16 (Canceled)